What is Claimed Is:

1. A method for concentration and purification of a nucleic acid using electrophoresis, characterized in that electric charge of an impurity in a sample containing the nucleic acid is adjusted, and then the sample is placed in an electric field so as to concentrate and purify the nucleic acid.

2. A method for concentration and purification of a nucleic acid using electrophoresis, characterized in that cationic surfactant is added to a sample containing a nucleic acid so as to adjust electric charge of an impurity in the sample, and then the sample is placed in an electric field for electrophoresis so as to concentrate and purify the nucleic acid.

3. A method for concentration and purification of a nucleic acid using electrophoresis, characterized in that cationic surfactant and nonionic surfactant are added to a sample containing a nucleic acid so as to adjust charge amount of an impurity in the sample, and then the sample is placed in an electric field for electrophoresis so as to concentrate and purify the nucleic acid.

4. A method for concentration and purification of a nucleic acid as set forth in claim 3, wherein the cationic surfactant adsorbs substance other than the nucleic acid so as to adjust the electric charge of the substance, and the adsorption of the substance to the cationic surfactant is adjusted by adjusting an amount of the added nonionic surfactant.

5. An apparatus for concentration and purification of a nucleic acid, characterized in that cationic surfactant and nonionic surfactant are added to a sample, and then the sample is electrophoresed so as to concentrate and purify the nucleic acids at a positive electrode side.

6. An apparatus for performing electrophoresis for concentration and purification of a nucleic acid, characterized in that a container, having a side wall formed of an insulator, is divided into a sample introduction

chamber and a nucleic acid recovery chamber by a conductive separation medium for preventing diffusion, and the container has ends connected to respective electrodes through respective buffer tanks.

7. A method for concentration and purification of a nucleic acid using electrophoresis, characterized in that an impurity in a sample containing nucleic acids is electrophoresed so as to contact the nucleic acid with a separation medium formed of material in which the nucleic acids having different molecular weights migrate at different rates corresponding to the difference of molecular weights, and then a target nucleic acid is recovered by a filter, through which nucleic acids that are smaller than the target nucleic acid can pass, and whose cross sectional area is decreased in the direction of migration.